I. Project Title: Water Division 5 Coordinated Facilities Study

II. Principal Investigators:

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III. Project Summary:

The primary purpose of the Coordinated Facilities Study is to provide information on water availability for enhanced spring peak flows in the 15-Mile Reach of the Colorado River for the benefit of endangered fish. The study is investigating alternatives capable of providing an average of 20,000 acre-feet/year to enhance the spring peak in the 15-Mile Reach in years with appropriate streamflow conditions. Provision of this water is an identified element of the Upper Colorado River Programmatic Biological Opinion (PBO).

Phase I, which has been completed, involved a preliminary investigation of numerous alternatives for expanded coordinated reservoir operations, modified Grand Valley irrigation and power operations, improved efficiencies of conveyance and distribution facilities, new storage facilities, and modified power plant operations and scheduling. Phase II will thoroughly investigate several of the most promising alternatives identified in Phase I.

A secondary purpose of the study is to summarize the evaluation of the same alternatives for providing flow enhancements to the 15 – Mile Reach during the late summer/early fall period.

IV. Study Schedule:

Phase I completed September 2000.
Completion of Phase II expected by September 2001.

V. Relationship to RIPRAP:

Colorado River Mainstem, I.A.5.m.(1). Water Division 5 Coordinated Facilities Study; Evaluate Options for Providing and Protecting Additional Peak Flows in the 15-Mile Reach.

VI. Accomplishment of FY 2000 Tasks and Deliverables, Discussion of Initial Findings and Shortcomings:

The following tasks were completed in FY 2000:

3 Meetings with Executive Committee
Phase I evaluation of all alternatives completed
Alternatives selected for further consideration in Phase II
Draft Phase I Report Published
Final Phase I Report Published
Development of Phase II Scope of Work, Alternatives and Ground Rules

The Phase II contract amendment was delayed several months due to contracting difficulties but is now completed. Phase II work commenced in October 2000 rather than during FY 2000. Phase II should be completed during FY 2001 as originally planned.

A summary of the Phase I results can be found in the attached Appendix.

VII. Recommendations:

Continue with Phase II as planned.

VIII. Project Status:

Project is ongoing. Although delayed several months due to contracting issues, Phase II is still scheduled for completion during FY 2001.

IX. FY 2000 Budget Status:

A.	Funds Provided:	$395,000	Total Funding, provided from FY1999 funds
B.	Funds Expended:	$160,000	
C.	Difference:	$235,000	

D. % of FY 2000 work completed, projected costs to complete:
At the end of FY 2000 Phase I was 100% complete at an estimated cost of $160,000. The remaining Phase I funding was carried over for Phase II tasks. Phase II was not started in FY 2000 as originally scheduled. However, it is still scheduled to be completed during FY 2001 at an estimated cost of $235,000.

E. Recovery Program funds spent for publication charges: $0

X. Status of Data Submission:

The Final Phase I report was published in September 2000.
The Final Phase II report will be available in September 2001.

XI. Signed: *Randy Seaholm* Date: December 3, 2000

APPENDIX

A BRIEF SUMMARY of the Coordinated Facilities Study Phase I results:

Alternatives that will be thoroughly investigated in Phase II

1. Expanded Coordinated Reservoir Operations
1 1a. Green Mountain Reservoir Operations
1b. Ruedi Reservoir Operations
1e. Denver Water System Operations
1g. Reduce Constraints on Existing Coordinated Reservoir Operations

4. New Storage Projects Below Shoshone
4m. New mainstem storage – focus on Webster Hill site
4f, g, n, o. New tributary storage that requires pumping – focus on the Roan Creek site

Alternatives that will be grouped together for further investigation in Phase II:

1d. CBT West Slope Facilities Operations will be investigated as a component of alternative
5a. East Slope Power Operations and Scheduling

1f. Bypass Diversions to Storage will be investigated as a component of
1g. Reduce Constraints on Existing Coordinated Reservoir Operations

3d. Reanalysis of Grand Valley Water Management Project,
3e. Analysis of Grand Valley Irrigation Company (GVIC) Water Management,
5b. Shoshone Power Plant and
6a. Insurance Pool will be further investigated as components of alternative
1. Expanded Coordinated Reservoir Operations

Alternatives that will NOT be further considered:

2. Expanded Coordinated Reservoir Operations
1c. Ruedi Reservoir Pumpback

3. Grand Valley-Centric Alternatives
2a. Gunnison River Diversion into OMID canals
2b. Replace OMID Hydraulic Pumps with Electric Pumps
2c. Pumping into GVIC System from Colorado River below 15-Mile Reach

4. Efficiencies of Conveyance and Distribution Facilities
   3a. NCWCD
   3b. SECWCD
   3c. Municipalities

5. New Storage Projects
   4a, b, c, d, e. New Storage Projects Above Shoshone
   4h, i, j, l. New Storage Projects Below Shoshone (on tributaries, pumping not required)

6. Power Plant Operations and Scheduling
   5c. Grand Valley Power Plant

6. Other Alternatives
   6b. Obtain historic irrigation consumptive use credits

The evaluation criteria are listed below.

There is no strict priority order to the evaluation criteria. A fatal flaw in any of these categories resulted in the alternative being dropped from further consideration in Phase II.

Members of the Executive Committee have emphasized the top considerations as avoiding or minimizing negative impacts to existing water users, avoiding or minimizing loss of project yield or project flexibility, and equitably distributing the negative effects of the alternatives among water users. Participation in implementing any alternative would be voluntary.

Volume of Water Available
Ability to Enhance 7 to 10 day peak
Frequency of Water Availability
Carry-Over Ability
Capital Cost
Annual O&M Cost
Effects on Other Project Yields
Effects on Other Projects' Operational Flexibility/Reliability
Water Rights Considerations
Administration Considerations
Legal Considerations
Institutional Considerations
Channel Constraints
Permitting Issues
Time Required to Implement